

SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800
 Rev. 8/27/01 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, CP4-9C18, 306-5429.

Date 1/14/03 Serial # 09/745302 Priority Application Date _____
 Your Name Karl Frech Examiner # 72019
 AU 2876 Phone 305 3491 Room CP4 6B24
 In what format would you like your results? Paper is the default. PAPER DISK EMAIL

If submitting more than one search, please prioritize in order of need.

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: _____

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. _____

What types of references would you like? Please checkmark:

Primary Refs _____ Nonpatent Literature _____ Other _____
 Secondary Refs _____ Foreign Patents _____
 Teaching Refs _____

What is the topic, such as the **novelty**, motivation, utility, or other specific facets defining the desired **focus** of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Litigation search for 09/745302

which is a continuation of 08/570,626

which is a continuation of 08/245,892

which is a continuation of 07/392,851

Staff Use Only

Searcher: _____
 Searcher Phone: _____
 Searcher Location: STIC-EIC2800, CP4-9C18
 Date Searcher Picked Up: _____
 Date Completed: _____
 Searcher Prep/Rev Time: _____
 Online Time: _____

Type of Search

Structure (#) _____
 Bibliographic _____
 Litigation _____
 Fulltext _____
 Patent Family _____
 Other _____

Vendors

STN _____
 Dialog _____
 Questel/Orbit _____
 Lexis-Nexis _____
 WWW/Internet _____
 Other _____

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Reissue Patents](#) ⓘ

Terms: **37166** ([Edit Search](#))

570626 (08) RE 37166 May 8, 2001

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

RE 37166

♦ [Get Drawing Sheet 1 of 17](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text.
If you do not have this FREE reader, you can download it now from www.adobe.com.

[Link to Claims Section](#)

May 8, 2001

Scanner with coupon validation

INVENTOR: Rando, Joseph F. - Los Altos Hills, California; Novak, Jeffrey M. - Lake Oswego, Oregon

CERT-CORRECTION: July 16, 2002 - (O.G. August 6, 2002) a Certificate of Correction was issued for this patent

APPL-NO: 570626 (08)

FILED-DATE: December 11, 1995

GRANTED-DATE: May 8, 2001

ASSIGNEE-AT-ISSUE: Spectra-Physics Scanning Systems, Inc., Eugene, Oregon, 02

ASSIGNEE-AFTER-ISSUE: September 12, 1996 - NONE, SECURITY AGREEMENT, FLEET BANK ONE EAST AVENUE ROCHESTER, NEW YORK 14638,, Reel and Frame Number: 008143/0568

LEGAL-REP: Lyon & Lyon

PUB-TYPE: May 8, 2001 - Reissue Patent (E1)

PUB-COUNTRY: United States (US)

REL-DATA:

Continuation of Ser. No. 08/245892, May 19, 1994, GRANTED PATENT Re. 35117, Utility Patent having no previously published pre-grant publication (A)

Reissue of: 07/392851, August 11, 1989, PENDING 05128520, July 7, 1992

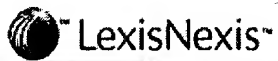
Reissue of: 08/245892, May 19, 1994, PENDING 01035117, December 12, 1995

US-MAIN-CL: 235#462.36

US-ADDL-CL: 235#375, 235#383, 235#462.37, 235#462.38, 235#487

CL: 235

SEARCH-FLD: 235#375, 235#383, 235#487, 235#462, 235#462.36, 235#462.37, 235#462.38, 235#462.39, 235#462.4, 364#401

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)[ECLIPSE™](#)[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Reissue Patents](#) ⓘ**Enter Search Terms**☒ **Terms and Connectors** ☐ **Natural Language**

37166

SearchUse connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)☒ **Suggest Words and Concepts for Entered Terms**☒ **Restrict Search Using Document Segments**

Optional: Restrict by Date

☒ **No Date Restrictions**

From

To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)[ECLIPSE™](#)[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Legal News](#) > [Patent, Trademark & Copyright Periodicals, Combined](#)

Enter Search Terms☒ **Terms and Connectors** ☐ Natural Language

5128520 or 5,128,520

SearchUse connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)☒ **Suggest Words and Concepts for Entered Terms**☒ **Restrict Search Using Document Segments**

Optional: Restrict by Date

☒ **No Date Restrictions**☐ From

To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found

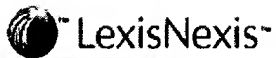
No documents were found for your search **((5128520 or 5,128,520))**. Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

[Edit Search](#)

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.



[Practice Area Pages](#) [Change Client](#) [Options](#) [Feedback](#) [Sign Off](#) [Help](#)

Search [Search Advisor](#) [Get a Document](#) [Shepard's® - Check a Citation](#) [ECLIPSE™](#) [History](#)

Sources [Guided Search Forms](#) [Command Searching](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Multi-Source Groups](#) > **[Patent Cases from Federal Courts and Administrative Materials](#)**

Enter Search Terms

☒ **Terms and Connectors** ☐ Natural Language

5128520 or 5,128,520

Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)

☒ **Suggest Words and Concepts for Entered Terms**

☒ **Restrict Search Using Document Segments**

Optional: Restrict by Date

☒ **No Date Restrictions**

☐ From To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found

No documents were found for your search **(5128520 or 5,128,520)**. Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

[Edit Search](#)

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)[ECLIPSE™](#)[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)[News & Business](#) > [News](#) > [News Group File, All](#) ⓘ**Enter Search Terms**☒ **Terms and Connectors** ☐ Natural Language

5128520 or 5,128,520

SearchUse connectors to show relation of terms (cat or feline, jane w/3 doe) [more...](#)☒ Suggest Words and Concepts for Entered Terms☒ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions☐ From

To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found

No documents were found for your search **(5128520 or 5,128,520)**. Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

[Edit Search](#)

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility Patents](#) ⓘ

Terms: **patno=5128520** ([Edit Search](#))

392851 (07) 5128520 July 7, 1992

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5128520

♦ [GET 1st DRAWING SHEET OF 16](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text. If you do not have this FREE reader, you can download it now from www.adobe.com.

[Link to Claims Section](#)

July 7, 1992

Scanner with coupon validation

REISSUE: Reissue Application filed Dec. 11, 1995 (O.G. Mar. 5, 1996) Ex. Gp.: 2309; Re. S.N. 08/570,626 This Patent was reissued on Dec. 12, 1995 as Reissue Patent Re 35,117. Reissue Application filed May 19, 1994 (O.G. Jul. 26, 1994) Ex. Gp.: 2309, (O.G. March 5, 1996)

INVENTOR: Rando, Joseph F., Los Altos Hills, CA; Novak, Jeffrey M., Eugene, OR

APPL-NO: 392851 (07)

FILED-DATE: August 11, 1989

GRANTED-DATE: July 7, 1992

ASSIGNEE-AT-ISSUE: Spectra-Physics, Inc., San Jose, CA

ASSIGNEE-AFTER-ISSUE: October 16, 1989 - ASSIGNMENT OF ASSIGNORS INTEREST., SPECTRA-PHYSICS, INC., 3333 NORTH FIRST STREET, SAN JOSE, CALIFORNIA 95134 A CORP. OF DE, Reel and Frame Number: 005163/0084

May 2, 1994 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., SPECTRA-PHYSICS SCANNING SYSTEMS, INC. 959 TERRY STREET EUGENE, OREGON 97402, Reel and Frame Number: 006962/0851

September 12, 1996 - NONE SECURITY AGREEMENT, FLEET BANK ONE EAST AVENUE ROCHESTER NEW YORK 14638, Reel and Frame Number: 008133/0346

February 17, 1998 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., SPECTRA-PHYSICS SCANNING SYSTEMS, INC. 959 TERRY STREET EUGENE OREGON 97402, Reel and Frame Number: 008975/0738

LEGAL-REP: Freiburger, Thomas M.

PUB-TYPE: July 7, 1992 - Utility Patent having no previously published pre-grant publication (A)

PUB-COUNTRY: United States (US)

US-MAIN-CL: 235#375

US-ADDL-CL: 235#383, 235#462.01, 235#487, 705#14

CL: 235, 705

SEARCH-FLD: 235#375, 235#376, 235#462, 235#383, 235#385, 235#387, 235#381, 364#401,

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Reissue Patents](#) ⓘ

Terms: **5128520** or **5,128,520** ([Edit Search](#))

✓ Select for FOCUS™ or Delivery



245892 (08) RE 35117 December 12, 1995

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT
RE 35117

♦ [GET 1st DRAWING SHEET OF 16](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text. If you do not have this FREE reader, you can download it now from www.adobe.com.

[Link to Claims Section](#)

December 12, 1995

Scanner with coupon validation

INVENTOR: Rando, Joseph F., Los Altos Hills, CA; Novak, Jeffrey M., Lake Oswego, OR

APPL-NO: 245892 (08)

FILED-DATE: May 19, 1994

GRANTED-DATE: December 12, 1995

ASSIGNEE-AT-ISSUE: Spectra-Physics Scanning Systems, Inc., Eugene, OR

ASSIGNEE-AFTER-ISSUE: September 12, 1996 - NONE SECURITY AGREEMENT, FLEET BANK ONE EAST AVENUE ROCHESTER NEW YORK 14638, Reel and Frame Number: 008133/0346
February 13, 2001 - SECURITY INTEREST (SEE DOCUMENT FOR DETAILS)., FLEET NATIONAL BANK, AS ADMINISTRATIVE AGENT 111 WESTMINSTER STREET PROVIDENCE RHODE ISLAND 02903, Reel and Frame Number: 011474/0204

LEGAL-REP: Lyon & Lyon

PUB-TYPE: December 12, 1995 - Reissue Patent (E1)

PUB-COUNTRY: United States (US)

REL-DATA:

Addition of Ser. No. **5128520**, July 7, 1992

US-MAIN-CL: 705#14

US-ADDL-CL: 235#375, 235#383, 235#462.01, 235#487

CL: 705, 235

SEARCH-FLD: 364#401, 364#405, 235#462, 235#467, 235#487, 235#375, 235#376, 235#383, 235#385, 235#387, 235#381

IPC-MAIN-CL: G 06K015#0

1/14/03

RE 37,166

09/745302

WELCOME to QUESTEL-ORBIT- Your Guide to INTELLECTUAL PROPERTY

Selected file: PLUSPAT

Search statement 2

?re37166/pn

** SS 2: Results 1

Search statement 3

?prt fu legalall max

1/1 PLUSPAT - (C) QUESTEL-ORBIT

PN - USRE37166 E1 20010508 [USRE37166]
TI - (E1) Scanner with coupon validation
PA - (E1) SPECTRA PHYSICS SCANNING SYST (US)
IN - (E1) NOVAK JEFFREY M (US); RANDO JOSEPH F (US)
AP - US57062695 19951211 [1995US-0570626]
PR - US57062695 19951211 [1995US-0570626]
- US39285189 19890811 [1989US-0392851]
- US24589294 19940519 [1994US-0245892]
IC - (E1) G02B-005/08 G02B-026/00 G06K-007/10
EC - G06K-007/10E1
- G06K-007/14
- G07G-001/00C
- G07G-001/12
PCL - ORIGINAL (O) : 235462360; CROSS-REFERENCE (X) : 235375000 235383000
235462370 235462380 235487000
DT - Corresponding document
CT - USRe35117; US3734286; US3949194; US3958104; US4369361; US4554446;
US4560862; US4587407; US4652732; US4791281; US4799164; US4839507;
US4848862; US4867257; US4933538; US4939355; US4949256; US5008519;
US5019694; US5019714; US5042619; US5073702; US5081364; US5151581;
US5206491; US5208445; US5229588; US5250789; US5250791; US5256864;
US5293033; US5478997; US5504316; US5608202; US5637856; US5693930;
BE899019; DE2329041; EP0276589; EP0325469 B1; FR2145155; FR2367320;
GB1445100; JP63-109590; JP63-146198; JP63-178376; JP63-192175;
JP1-142072; JP1-144953; JP2829331; JP2-83686; JP2-83681; JP2-231688;
JP3-103995; JP3-129583; JP3-167683; JP3257692; JP3-167683; JP5-6484;
WO9001715
- N.Nishids, "Optical System of the POS scanner", Machine Design, vol.
29, No. 8, pp. 69-73 (with translation of figure 9), 1985.*

In re Kaslow, 217 USPQ 1089 (1983).*

JP-A-59 154573 (Sanden K.K.) 1984, Patent Abstracts of Japan, vol. 9,
No. 6 (P-0326) 1729.

Laser Scan 5000 Brochure Symbol Technologies 1991 (no month).

Orion -1 Brochure; ICL Datachecker 1989 (no month) Figures A-1, A-2,
A-3.

Freedom Brochure; Spectra-Physics (May 1989).

H. Ikeda et al., "Bar-Code Reading Technology", Bulletin of the
Precision Engineering Society, vol. 54, No. 12, pp. 28-32 (1988).

1/14/03

RE 37,166

09/745302

T. Inagaki et al., "Applying Holograms to Pattern Input/Output Technology", Fujitsu, vol. 38, No. 2, pp. 137-142 (1987).

STG - (E1) Reissue Patent

AB - A point of sale (POS) bar code scanner such as in common use in retail stores includes provision for reading bar coded redemption coupons (or other bar coded documents redeemable for value) in a manner secure from a human operator. Integration of functions between the POS scanner and the coupon reader varies with different embodiments described. Through software associated with bar code decoding logic, a comparison is made between information on a validation coupon and information on items presented for purchase, and a decision is made as to whether the redemption coupon is valid and redeemable in this transaction. In one embodiment, the bar code scanner simply receives the redemption coupon face down on the product scanner window, and integrated decode logic of the scanner identifies the bar code as belonging to a redemption coupon, then makes the comparison and validation of the coupon for the particular transaction. In some embodiments of the invention, the POS product scanner has a special beam exit window through which the scanning beam is diverted when it is signified that a redemption coupon is to be read, with a coupon reading scan pattern. After validation the coupon may be punched or otherwise cancelled, and/or sent to a secure container. Several types of securing devices are disclosed, for preventing subsequent use of redeemed coupons.

UP - 2001-22

1/1 LGST - (C) LEGSTAT

PN - US 37166 [USRE37166]

AP - US 570626/95 19951211 [1995US-0570626]

DT - US-E

ACT - 19951211 US/AE-A

APPLICATION DATA (PATENT)

{US 570626/95 19951211 [1995US-0570626]}

- 20010508 US/E1 [+]

REISSUE (PRE-GRANT)

- 20020716 US/CC

CERTIFICATE OF CORRECTION

UP - 2002-35

1/1 CRXX - (C) CLAIMS/RRX

AN - 3505015

PN - 37,166 E 20010508 [USRE37166]

PA - Spectra Physics Scanning Systems Inc

PT - M (Mechanical)

ACT - 20020806 CERTIFICATE OF CORRECTION

UP - 2002-32

UCOR- 2002-08-06

1/2 PAST - (C) Thomson Derwent

AN - 200232-000057

PN - RE37166 E [USRE37166]

DT - RE (REISSUE)

OG - 2002-08-06

CO - COR

ACT - CERTIFICATE OF CORRECTION

1/14/03

RE 37,166

09/745302

SH - CERTIFICATE OF CORRECTION

2/2 PAST - (C) Thomson Derwent

AN - 200119=003027

PN - 5035117 A [US5035117]

DT - A (UTILITY)

OG - 2001-05-08

CO - RE

ACT - REISSUE PATENT

SH - REISSUE PATENT

RL - USRE37166

Search statement 3

?file inpadoc

Selected file: INPADOC

Search statement 2

?fam us37166/pn

1 Patent Groups

** SS 4: Results 3

Search statement 5

?famstate.nonstop

1/3 INPADOC - (C) INPADOC

PN - US 37166 E1 20010508 [US--37166]

TI - SCANNER WITH COUPON VALIDATION

IN - RANDO JOSEPH F [US]; NOVAK JEFFREY M [US]

PA - SPECTRA PHYSICS SCANNING SYST [US]

AP - US 570626/95-A 19951211 [1995US-0570626]

PR - US 570626/95-A 19951211 [1995US-0570626]

- US 392851/89-A5 19890811 [1989US-0392851]

- US 245892/94-A1 19940519 [1994US-0245892]

IC - G02B-005/08; G02B-026/00; G06K-007/10

2/3 INPADOC - (C) INPADOC

PN - US 5128520 A 19920707 [US5128520]

TI - SCANNER WITH COUPON VALIDATION

IN - RANDO JOSEPH F [US]; NOVAK JEFFREY M [US]

PA - SPECTRA PHYSICS [US]

AP - US 392851/89-A 19890811 [1989US-0392851]

PR - US 392851/89-A 19890811 [1989US-0392851]

IC - G06K-015/00; G06F-015/21

1/1 LEGALI - (C) LEGSTAT

PN - US 5128520 [US5128520]

AP - US 392851/89 19890811 [1989US-0392851]

DT - US-P

1/14/03

RE 37,166

09/745302

ACTE- 19890811 US/AE-A
APPLICATION DATA (PATENT)
{US 392851/89 19890811 [1989US-0392851]}

- 19891016 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
SPECTRA-PHYSICS, INC., 3333 NORTH FIRST STREET, SAN JOSE, CALIFORNIA
95134 A CO * RANDO, JOSEPH F. : 19891006; NOVAK, JEFFREY M. : 19891003

- 19920707 US/A
PATENT

- 19940502 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
SPECTRA-PHYSICS SCANNING SYSTEMS, INC. 959 TERRY STREET EUGENE, OREGON
97402 * SPECTRA-PHYSICS, INC. : 19940425

- 19940726 US/RF
REISSUE APPLICATION FILED
940519

- 19960305 US/RF
REISSUE APPLICATION FILED
951211

- 19980217 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
SPECTRA-PHYSICS SCANNING SYSTEMS, INC. 959 TERRY STREET EUGENE, OREGON
97402 * SPECTRA-PHYSICS, INC. : 19940425

UP - 2000-06

3/3 INPADOC - (C) INPADOC
PN - US 35117 E 19951212 [USRE35117]
TI - SCANNER WITH COUPON VALIDATION
IN - RANDO JOSEPH F [US]; NOVAK JEFFREY M [US]
PA - SPECTRA PHYSICS SCANNING SYST [US]
AP - US 245892/94-A 19940519 [1994US-0245892]
PR - US 245892/94-A 19940519 [1994US-0245892]
- US 392851/89-A5 19890811 [1989US-0392851]
IC - G06K-015/00; G06F-017/60

1/1 LEGALI - (C) LEGSTAT
PN - US 35117 [USRE35117]
AP - US 245892/94 19940519 [1994US-0245892]
DT - US-E
ACTE- 19940519 US/AE-A
APPLICATION DATA (PATENT)
{US 245892/94 19940519 [1994US-0245892]}

- 19951212 US/E [+]
REISSUE

UP - 1998-03